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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/589,310

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Carlo Andretta

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EXAMINER

VINCENT, DAVID ROBERT

ART UNIT

PAPER NUMBER

2129

MAIL DATE

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09/16/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/589,310	Applicant(s) ANDRETTA ET AL.	
	Examiner DAVID R. VINCENT	Art Unit 2129	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 August 1960 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8/10/06</u> . | 6) <input type="checkbox"/> Other: _____ |

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Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the evaluation results" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Winkler** (US 7,288,515) in view of **Koeferli** (Application of Classical and Novel Sensory Techniques

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in Product Optimization, 1998) and further in view of **Kita** et al. (6,834,530).

Winkler discloses:

1. Method for producing a fragrance and/or aroma composition, characterized by using a composition database that is comprised of recipe vectors and attribute vectors associated with a group of base compositions that can be manufactured by mixing predetermined substance components (Fig. 1 or abstract or summary), whereby each recipe vector specifies the proportions of the substance components that are required for the creation of the associated base composition (102, Fig. 1) and whereby each attribute vector specifies the evaluation results with regard to selected sensory attributes of the associated base composition (amount of change being removed or added, Fig. 1 and respective disclosure), and whereby the method consists of the following steps:

- a) specifying a target attribute vector (110, Fig. 1);**
- b) determining an operator which effects a transformation from recipe vectors to attribute vectors at least in a surrounding of the target attribute vector (inherent math operators used in adding or subtracting, 106, 108);**
- c) establishing a target recipe vector with the proviso that it is transformed to the target attribute vector by using**

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said operator (base formula is converted to target formula, Fig. 1); **and**

d) mixing the predetermined substance components with proportions according to the target recipe vector (completing process, e.g., 114, Fig. 1 and respective disclosure).

However, Winkler fails to particularly call for the math which would/could include the details of vectors, and using sensory attributes (title, Fig. 5, abstract, and section titled The Beginning), as specified in Fig. 1.

Koeferli teaches using vectors (inherent vectors using in PCA, Fig. 1, pg. 410) in a production process (optimization process), as specified in claim 1;

specifying a target attribute vector (vectors used in redesigning a product using PCA, pg. 412, right column);

determining an operator (inherent math operators used in transforming vectors to new redesigned product).

Kita is used to make it more clear that vectors are or can be used in the production process (Figs. 2, 4, 5, 8, and respective disclosure), and that the vectors are or can be calculated using operators (51, Fig. 1; 84, Fig. 11) and stored in a database (e.g., memory used by processor).

It would have been obvious to combine the three references because the base reference Winkler discloses producing a

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fragrance/aroma by starting with a base product, Koeferli teaches that it is well known to use various math processes to accomplish the process of Winkler, and Kita discloses in pictures how vectors can be used for the purpose of representing the ingredients in the fragrances. Adding math such as PCA would make the process work faster and have more capabilities. PCA and the other techniques taught by Koeferli inherently use vectors but adding Kita makes it more clear how the vectors can be used to represent ingredients and how the vectors would be stored in memory. Referring to the memory of Kita as a database is obvious because a database comprises of an organized collection of data for one or more uses, typically in digital form. Furthermore, it is obvious if not inherent that the sophisticated processing being done in Koeferli would include a database.

2. Method according to claim 1, wherein the composition database is produced by the following steps:

a) preparing the group of base compositions by mixing the substance components in proportions according to a recipe vector that is associated to each base composition (Winkler: e.g., 102, Fig. 1);

b) quantitatively evaluating each one of the base compositions with regard to the selected sensory attributes and creation of the associated attribute vector (Winkler: e.g., 104, Fig. 1); and

c) creating the composition database by storing the recipe vectors and attribute vectors in such a way that the vectors that are associated to each base composition can be retrieved in relation to one another and to the base composition (Winkler: abstract, or executing computer program in Fig. 1).

3, 10. Method according to claim 1, wherein the evaluation of the sensory attributes is based on quantitative descriptive analysis (Koeferli: title, The Beginning section, sensory analysis, pg. 412; Fig. 5) .

4, 11. Method according to claim 1, wherein the attributes used to create the attribute vectors are selected by means of a factor analysis (not further defined, reads on inherent math operations performed by Koeferli, e.g., pg. 413).

5, 12. Method according to claim 1, wherein the operator is established by means of one of multiple regression, neuronal

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networks, and an expert system (Koeferli: neural network, regression analysis, pg. 413).

6, 13. Method according to claim 1, wherein the target recipe vector is determined by means of statistical test planning (Koeferli: e.g., statistical methods, pg. 413).

7, 14-16. Method according to claim 1, wherein the target attribute vector is determined through the attribute evaluation of a predetermined composition (not further defined, reads on Koeferli: using sensory analysis, and obtaining a new product using PCA and/or regression, pgs. 412-413).

9. Device for carrying out the method according to claim 1, with a data processing unit, as well as with a mixing device that is controlled by it, whereby the data processing unit comprises means for the entry, storage and retrieval of at least one composition database, as well as means for the entry of attribute vectors, means for the calculation of target recipe vectors and means for the transfer of control signals that are shaped according to the recipe vectors to the mixing device, and whereby mixing the device features the following components: a) a plurality of storage containers that can be filled with

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individual substance components; b) a plurality of receptacles; c) a controllable feeding device to bring predetermined quantities of individual substance components from the corresponding storage containers to the receptacles for the creation of one of a fragrance and aroma composition.

Claim Rejections - 35 USC § 103

Claims 1-7, 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of **Winkler, Koeferli, and Kita** in view of Staples (US 6,212,938).

Although the combination discloses using vectors, PCA, and regression (Koeferli: e.g., Figs. 1-2, 4; Kita: Fig. 4), the combination fails to particularly call for **the Method according to claim 1, wherein attribute vectors are represented in the form of polar diagrams, as specified in claim 8, and 17-20.**

Staples teaches **wherein attribute vectors are represented in the form of polar diagrams, as specified in claim 8, and 17-20** (Staples: Figs. 7-8, and 10 and respective disclosure).

It would have been obvious to combine Staples with the combination of Winkler, Koeferli, and Kita because putting the data in a polar/radar form makes it easier for humans to visualize, whereas vectors are basically a math process that are generally not displayed.

Examiner Notes

The examiner has considered the applicant's claims in light of the disclosure. However, the examiner respectfully reminds the applicant that during prosecution before the USPTO, **claims are to be given their broadest reasonable interpretation**, and the scope of a claim cannot be narrowed by reading disclosed limitations into the claim. See *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997). The Office must apply the broadest reasonable meaning to the claim language, taking into account any definitions presented in the specification. In *re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004) (citing *In re Bass*, 314 F.3d 575, 577 (Fed. Cir. 2002)).

Note that "*limitations appearing in the specification will not be read into the claims*, and ... interpreting what is meant by a word in a claim is not to be confused with adding an extraneous limitation appearing in the specification, which is improper." *Intervet Am., v. Kee-Vet Labs.*, 887 F.2d 1050, 1053, 12 USPQ2d 1474 1476 (fed. Cir. 1989).

"The ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313, 75 USPQ2d 1321, 1326 (fed. Cir. 2005).

"One purpose for examining the specification is to determine if the patentee has limited the scope of the claims.'... For example, an inventor may choose to be his own lexicographer is he defines the specific terms used to describe the invention' with reasonable clarity, deliberateness, and precision." Such a definition may appear in the written description, ... or in the

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prosecution history, ..." Teleflex, Inc. v. Ficos N. Am Corp.,
299 F.3d 1313, 1325, 63 USPQ2d 1374, 1381 (Fed. Cir. 2002).

Prior art pertinent to the disclosed invention is also
cited and Applicants are reminded that they *must consider all
cited art under Rule 111(c) when amending the claims* to conform
with 35 U.S.C. 112.

Conclusion

Any inquiry concerning this communication or earlier
communications from the examiner should be directed to
David R. Vincent whose telephone number is (571) 272-3080.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks,
Washington, D. C. 20231;

Hand delivered to:

Receptionist,
Customer Service Window,
Randolph Building,
401 Dulany Street,
Alexandria, Virginia 22313,
(located on the first floor of the south side of the
Randolph Building);or

faxed to:

(571) 272-3150 (for formal communications intended for
entry.)

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/David R Vincent/

Primary Patent Examiner, Art Unit 2129

Typical schedule is M-Fr, 8-4:30.